REMARKS

This paper is filed in response to the official action dated November 3, 2009 (hereafter, the "official action"). This paper is timely filed as it is accompanied by a petition for extension of time and authorization to charge our credit card in the amount of the requisite fee. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith, to our Deposit Account No. 13-2855, under Order No. 29610/CDT337.

All pending claims 1-16 stand rejected. Claims 1-3, 6-12, 15, and 16 have been rejected as assertedly obvious over U.S. Patent Publication No. 2003/0234609 A1 to Aziz et al ("Aziz") in view of International (PCT) Patent Publication No. WO 2004/004421 A2 to Bechtel et al. ("Bechtel"). Claims 4 and 5 have been rejected as assertedly obvious over Aziz and Bechtel in further view of U.S. Patent Publication No. 2003/012797 to Hofstra et al. ("Hofstra"). Claims 13 and 14 have been rejected as assertedly obvious over Aziz in view of Hofstra.

The outstanding rejections are addressed below in the order presented in the official action.

CLAIM REJECTIONS -- 35 U.S.C. §103(a)

Claims 1-3, 6-12, 15, and 16 have been rejected as assertedly obvious over Aziz in view of Bechtel. Claims 4 and 5 have been rejected as assertedly obvious over Aziz and Bechtel in further view of Hofstra. Claims 13 and 14 have been rejected as assertedly obvious over Aziz in view of Hofstra.

The applicants respectfully traverse the rejections.

Claims 1-12, 15, and 16 are directed to an OLED comprising a substrate bearing a light emitting layer between an electrically conducting anode and an electrically conducting cathode, the cathode comprising (i) an electron injecting layer for injecting electrons into said light emitting layer, (ii) an optical interference structure, and (iii) an electrically conducting layer, said electron injecting layer being closest to the light emitting layer and said optical interference structure being disposed between said electron injecting and electrically conducting layers, wherein said optical interference structure is configured to enhance light transmission through said cathode at said emission wavelength.

Aziz discloses a display device composed of a cathode, an anode, a luminescent region between the cathode and the anode. The cathode can comprise a metal-organic mixed layer (MOML). The cathode can further comprise a capping region to protect the MOML from ambient conditions (see paragraph 0207). Similarly, the cathode can further comprise a separate electron injecting region to facilitate electron injection from the MOML (see paragraph 0208).

Aziz does not disclose an optical interference structure as claimed. In this respect, it appears the examiner proposes to equate the MOML layer(s) to the claimed optical interference structure. Specifically, it appears that the examiner considers the electrode embodiment disclosed in Aziz at paragraph 0225 and Figure 20, that includes a capping region, two distinct MOML layers, and an electrically conductive layer to correspond (in some sense) to the claimed subject matter. Aziz, however, is generally directed to decreasing light ambient reflection from a device (see, for example, paragraphs 0006 and 0104). Aziz fails to appreciate that incorporating an optical interference structure in a cathode as claimed can increase outcoupling from the device. As a result, Aziz fails to provide or suggest any motivation for varying the refractive indices or the relative thicknesses of the various layers disclosed therein to provide a cathode comprising an optical interference structure as claimed.

Bechtel discloses OLED-based display devices in which transparent dielectric layers 5, 6 are external to and layered upon transparent second electrode/cathode 4 (*see*, for example, Bechtel at page 4, lines 13-17 and Fig. 1). According to Bechtel, this configuration is advantageous because "[t]he actual manufacturing process of the electroluminescent device remains unchanged because the transparent dielectric layers are provided only at the end of the process" (*see* Bechtel at p. 2, lines 23-25). Thus, Bechtel teaches away from and fails to suggest a cathode comprising an electron injecting layer for injecting electrons into said light emitting layer, an optical interference structure, and an electrically conducting layer, said electron injecting layer being closest to the light emitting layer and said optical interference structure being disposed between said electron injecting and electrically conducting layers, as recited in all pending claims because, for example, incorporating such a cathode structure into the OLED would necessarily change the manufacturing process. Accordingly, in view of the absence of any recognition in Aziz that any of the layers disclosed therein can be constructed and arranged to function as an optical interference structure, and the teaching

away in Bechtel from incorporating such a structure in a cathode, one of ordinary skill would hardly be motivated to combine these documents as proposed. Thus, the rejections of claims 1-12, 15, and 16 should be removed.

With respect to claims 13 and 14, Aziz also fails to disclose or suggest an OLED-based display device including one or more OLEDs having a first electrode layer comprising a spacer layer sandwiched between a coupling layer for connecting to an OLED material and a third, substantially electrically conductive layer, wherein said spacer layer has a thickness of approximately an odd integral number of quarter wavelengths at said peak electroluminescence wavelength such that transmission through said first electrode layer at said peak electroluminescence wavelength is substantially maximised. As mentioned above, Aziz fails increasing outcoupling from the device. As a result, Aziz fails to provide or suggest any motivation for varying the relative thicknesses of the various layers disclosed therein to provide a spacer layer as claimed.

Hofstra teaches a device which emits through the anode, and fails to teach a multi-layered anode. Any optical interference structures disclosed in Hofstra are external to the electrodes. In view of the absence of any recognition in Aziz that any of the layers disclosed therein can be constructed and arranged as a spacer layer, as claimed, and the failure of Hofstra to disclose any structure which could accommodate such a spacer layer, one of ordinary skill would hardly be motivated by the teachings of Hofstra to form an electrode comprising a spacer layer, as recited in claims 13 and 14.

In view of the above comments, the applicants respectfully submit that a *prima facie* case of obviousness cannot be sustained.

CONCLUSION

It is submitted that the application is in condition for allowance. Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, she is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

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